A dramatic photograph of a stormy sky with dark, heavy clouds. A bright, jagged lightning bolt strikes down from the left side of the frame. The sky is tinged with a reddish-pink hue, suggesting a sunset or sunrise. The bottom of the image shows a dark, silhouetted horizon line.

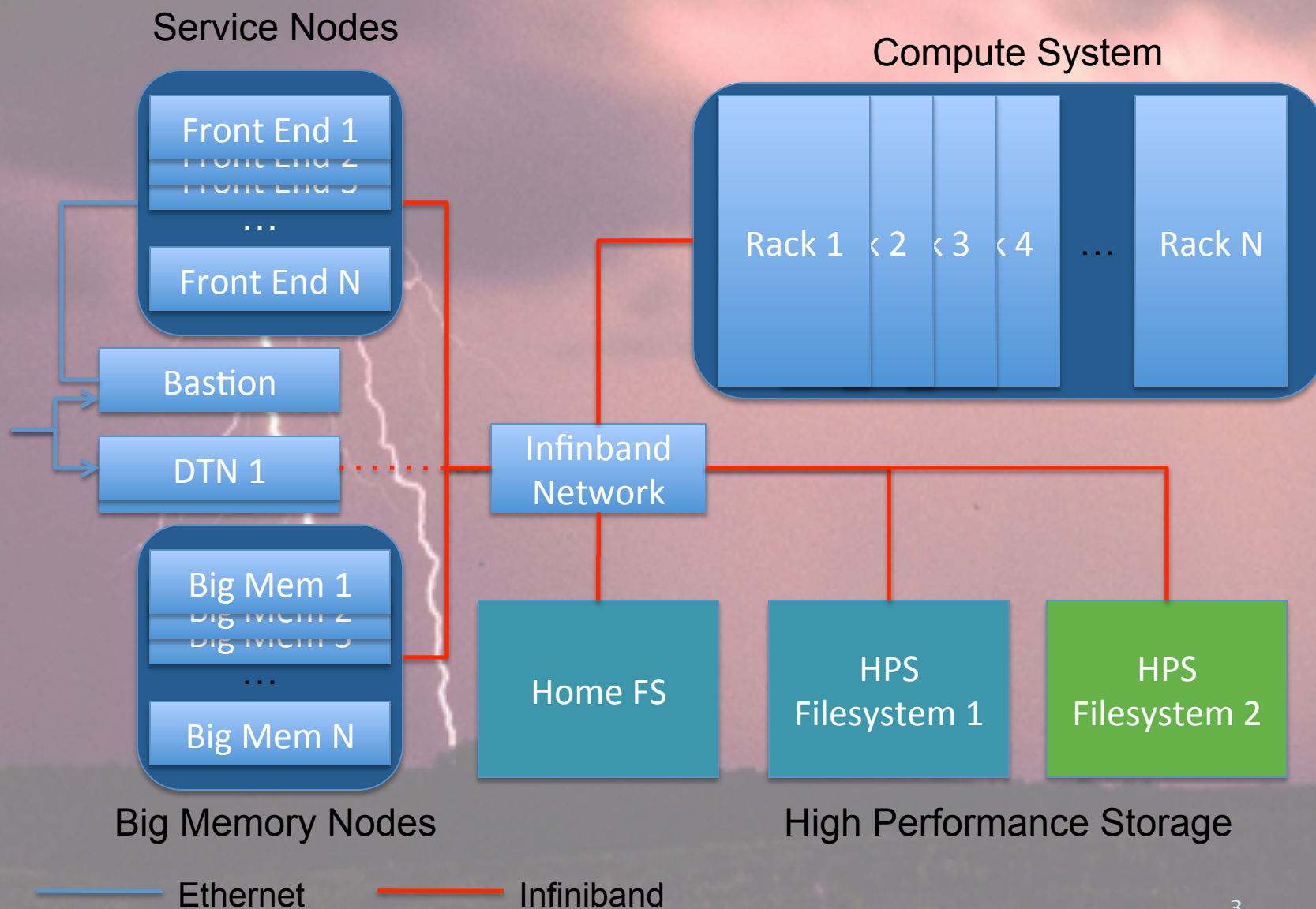
# Zeus Users' Meeting

January 18, 2012

# Agenda

- Overview
  - Zeus Architecture
  - Documentation
- Accessing Zeus
- Access Dates

# Zeus System Architecture





# Zeus Architecture

Zeus is similar in architecture to tJet. The chipset and interconnect components are the same. The software stack is based on Linux with some additional features from SGI.

Subsystem	Size
Service Nodes	8
Big Memory Nodes	6
Compute Nodes	2304
Compute Cores	27648
Total Flops	383 TF
Total Data Transfer Nodes	2+
HPS Capacity	5.8 PB
HPS Performance	> 50 GB/s

# Scratch File System Policy

- The high performance storage (HPS) file systems (/scratch1 and /scratch2) are fast, parallel, and scalable. They are to be used for model runs and storing model results. The following describes how these file systems are maintained.
  - The HPS file systems are allocated on a project basis
  - Quotas will be enforced on a per project basis
  - These file systems are scratch, and are not backed up
    - Users should use the HSM (HPSS) to store critical data
  - The HPS file systems will not be scrubbed
    - If projects desire this, they can implement it themselves and build their own policies



# Zeus Documentation

- NESCC Information site
  - <http://rdhpcs.noaa.gov/nescs/>
- FAQ Site
  - Click on FAQ link on left side –or–
  - [https://nescdocs.rdhpcs.noaa.gov/wiki/index.php/Main\\_Page](https://nescdocs.rdhpcs.noaa.gov/wiki/index.php/Main_Page)
    - There may be a warning about a certificate

# Accessing Zeus

- `ssh zeus.rdhpcs.noaa.gov`
  - Your first time you must create a pass phrase
  - A request for your certificate to be signed will be automatically submitted
- Over the next two weeks we will notify you to login to Herc. This is only to create your certificate (please only login unless you are an early user)
- To login to herc:
  - `ssh zeus.rdhpcs.noaa.gov`
  - Enter your pin and code from your token
  - Enter your pass phrase when prompted
  - When prompted hit ^C and then enter tfe1 (Herc front end)



# Access Dates

- New help system is available now:
  - Two new aliases:
    - Zeus: [rdhpcs.zeus.help@noaa.gov](mailto:rdhpcs.zeus.help@noaa.gov)
    - HPSS: [rdhpcs.hpss.help@noaa.gov](mailto:rdhpcs.hpss.help@noaa.gov)



# Access Dates

- Current Schedule is for February 1
  - This looks very realistic
  - We will have things as solid as possible, but there may be changes as we learn more about the best configuration
- Herc (the Test and Development System is available to a limited set of users now)

A dramatic sky with pink and purple clouds and a bright lightning bolt striking down.

Thank You!

now...

Open Forum